



Annual Report 2023–24

Our vision

A world in which there is access to high quality, evidencebased women's and reproductive healthcare for all.



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THE YEAR IN NUMBERS

£29,872,216 value of active grants in 2023-24

Eq. 9.12 donated to the Oxford Centre for the Endocrinology of Human Lactation (PI: Hannan) by the Family Larsson-Rosenquist Foundation 28 Pls with research groups

| | active |
|--|--------|
| | grants |
| | |

scientific publicati

Undergraduate rotation students

23 Postgraduate Taught students

655 Postgraduate Research students

4.61

Undergraduate student feedback for quality of teaching 3 new starters

10,000+

participants recruited by CRG into 30 ongoing studies

FOREWORD



HEAD OF DEPARTMENT PROF. KRINA ZONDERVAN

am delighted to share with you our department's inaugural annual report. The last few years have seen unprecedented awareness of the global and national disparities in the health of women*. This has led to calls for more research and improved evidence-based care strategies for conditions unique to women, those that disproportionately affect women, or those that impact men and women differently. Examples include the 2022 Women's Health Strategy for England, the 2023 US White House Initiative on Women's Health Research, and the 2024 World Economic Forum-McKinsey report on the \$1 trillion opportunity in closing the women's health gap.

Established in 1937, our multidisciplinary department is privileged to be working at the forefront of advancing women's and reproductive health through research and teaching; and improving the quality and delivery of women's healthcare across the globe. The accomplishments highlighted within this report underscore our collective dedication to this mission.

During this academic year, our dedicated team's tireless efforts have culminated in securing over £29 million in funding, producing 177 scientific publications, and delivering teaching and supervision for 269 students. In this report, you will find selected highlights of our research across our five Themes, our teaching courses, our clinical studies, and our public outreach projects. Among the highlights is an incredibly generous £9.12 million endowment of the Oxford Centre for the Endocrinology of Human Lactation that will ensure its long-term sustainability, for which we express our huge thanks to the Family Larsson-Rosenquist Foundation. The impressive feedback scores for our educational courses highlight our commitment to maintaining high standards in training the next generation of clinicians and scientists. And the successful execution of our 2018-2023 strategy showcases our collective resilience and teamwork.

Our gratitude extends to everyone who has participated in our research; to our many local, national and international collaborators and partners, in particular the Oxford University Hospitals NHS Foundation Trust; and to the University of Oxford for its continued support. I would also like to extend a heartfelt thank you to our funders. Their financial support has been essential to our achievements, allowing us to pursue pioneering research in historically underfunded topic areas, and support our students and staff.

Our work covers many of the priority areas identified in the Women's Health Strategy for England, and our new 2023/24–2027/8 strategic plan reflects our continued commitment to deliver ground-breaking research and innovative teaching that has both national and global impact.

Delivery of our strategic plan goes hand in hand with commitment to our Behaviour Charter which includes excellence, leadership, collaboration, clarity, responsibility, ethics & integrity. I am delighted and proud to say that our department was awarded Athena Swan GOLD status for our continued investment in our people.

While the funding climate undoubtedly remains challenging, we have ambitious plans to invest in interdisciplinary research in areas of urgent clinical need (e.g. women's mental health) and great opportunity (e.g. data science). Plans are also underway to introduce new postgraduate courses addressing critical training. In all this, collaboration with other departments, institutions and partners locally and (inter)nationally remains key to our mission. I hugely look forward to working together on our shared goals.

Krina

OUR FIVE-YEAR STRATEGY

Click for more information about our five-year strategy and our commitments



N DWRH published its 2018/19 – 2022/23 Strategy in 2018, marking the first of its kind within the Medical Science Division of the University. Implemented through a new leadership framework and SMART priorities, 70% of the strategy was accomplished by 2023 despite 22 out of 60 months being lost due to pandemic disruptions.

In August 2022, the Government published the Women's Health Strategy for England, highlighting disparities in health and disability between women and men.

The report pointed to gaps in understanding and managing female-specific conditions and major public health issues like cardiovascular disease and cancer, which affect women and those assigned female at birth differently. Our department is dedicated to improving women's and reproductive healthcare worldwide through innovative research and transformative education. This year, we launched our 2023/24–2027/28 Strategy, focusing on Research, Education, and People & Resources to achieve this mission (see below).

We are proud to announce that we were awarded Athena Swan GOLD status this year, with core values of **equality**, **inclusion**, **collaboration**, **support**, **respect** and **transparency** embedded in our Action Plan.



RESEARCH

Commitments for the Research Working Group (RWG)

- Build and enable ambitious, world-leading, pioneering research of exceptional quality in the field of WRH.
- Invest in our people and infrastructure and support the wider research environment, thereby enabling our research endeavours to grow sustainably.
- **3.** Increase and diversify the research funding portfolio to ensure the ongoing growth and overall sustainability of the department in conducting and delivering world-class research.
- **4.** Maximise the public benefit deriving from our research at the regional, national, and international level.

EDUCATION

Commitments for the Education Working Group (EWG)

- Attract, admit and support students with outstanding academic potential, from all backgrounds.
- 2. Offer all our students the best teaching and research experience and ensure that we equip each with the knowledge to excel in their chosen field and be a global citizen.
- **3.** Continue to build departmental teaching, supervisory, and mentoring skills to ensure students receive the best possible support during their time with us.

PEOPLE & RESOURCES

Commitments for the People & Resources Working Group (PRWG)

- **1.** Attract, recruit and retain the highest calibre staff.
- **2.** Invest in our people to ensure they reach their full potential.
- **3.** Ensure our premises provide an environment which enables world-class research and education whist minimising our environmental impact and improving space utilisation.
- **4.** Manage our resources, to ensure the department's long-term sustainability.



Click for more information and links to important scientific publications





THEME LEAD DR. KARIN HELLNER COORDINATOR DR. MARA ARTIBANI

THEME RESEARCH GROUPS

- HPV and Cervical Cancer (Hellner)
- Nanotherapeutics (Townley)
- Ovarian Cancer (Ahmed)
- Targeting energy metabolism as a therapeutic strategy (Morten)
- Molecular medicine (Yau)

The Cancer theme is dedicated to advancing research across a broad spectrum of oncology topics, with a particular focus on cervical and ovarian cancer, innovative treatments targeting metabolism, nanoparticle-based therapies, and the application of artificial intelligence.

Over the past year we have emphasised integration and collaboration within our five departmental research groups, as well as with partners across the University (e.g. the Jenner Institute, the Ludwig Institute for Cancer Research), the Sir William Dunn School of Pathology and the Oxford Cancer programme.

Looking ahead, we aim to further strengthen our collaborative efforts across the University and beyond, fostering an environment of shared resources, knowledge, and expertise that would allow us to make a difference to improving the lives of many cancer patients.



YEAR IN HIGHLIGHTS

- » Article on targeting paediatric tumour cells featured in Diamond Annuals Review 2023.
- » Raised funds for the charity, William's Fund, to support crucial research.
- » Single-cell transcriptomics identifies a signalling axis that maintains fallopian tube stem cells. <u>Cell Reports 2023;</u> 42:113354
- » Rarity: discovering rare cell populations from single-cell imaging data introduced a Bayesian model to improve rare cell type identification. <u>Bioinformatics 2023; 39:12</u>
- » Large tumour-derived extracellular vesicles as prognostic indicators of metastatic cancer patient survival. <u>British Journal of Cancer 2023; 128,</u> <u>471–473</u>.
- » Review into Raman microspectroscopy and machine learning for single-cell immune system analysis, featuring cell sorting, stable isotope probing, and imaging for advancements in immunometabolism. <u>Biochem Soc</u> <u>Trans 2024; 52: 733–745</u>.

- » Prof. Ahmed Ahmed received the 2023 Royal College of Obstetricians & Gynaecologists Academic Award.
- » The department spin-out SingulaBio was awarded the Start Up Health Innovation Trailblazer Award at the UAE International Genomics Awards 2024.
- » Dr. Mara Artibani was a finalist for the Early-career Entrepreneur of the Year Award at the Cancer Research Horizons Innovation & Entrepreneurship Awards 2024.



Click for more information and links to important scientific publications





THEME LEAD PROF. KAZEM RAHIMI

COORDINATOR DR. YI YIN

THEME RESEARCH GROUPS

- Antepartum Monitoring (Jones/Redman/Vatish)
- Intelligent Imaging in Fetal Health (Papageorghiou)
- Placental Imaging (Collins)
- Oxford Labour Monitoring (Georgieva)
- Digital phenotyping (Nelläker)
- Deep Medicine (Rahimi)
- MuM-PreDICT (Yau)
- Endometriosis (Becker/Zondervan)
- Pain in Women (Vincent)

The Data Science theme intersects with the other four department themes, as it aims to integrate itself across research groups and explore collaboration opportunities, both internally and externally.

Since its launch in July 2023, the theme has rapidly grown, with a 26% increase in membership across nine PI groups.

Research within the Data Science theme leverages diverse medical data, including genomics, ultrasound, CTG, electronic health records, and histology. Cuttingedge data science technologies, with a strong focus on machine learning methods, are being adopted to advance scientific understanding and clinical practices.



YEAR IN HIGHLIGHTS

- » Launched INTERGROWTH-21st App to improve newborn and preterm growth patterns globally.
- » Developed AI diagnosis for ovarian cancer, highlighted in the Physiology Society's AI Taskforce report and magazine. <u>Physiology Society</u> 2023; 132
- » Exploring the capabilities of ChatGPT in women's health, <u>Nature Women's</u> <u>Health 2024; 26</u>
- » Improved placental histology analysis by using AI, enabling a hierarchical representation from cells to tissues. This advancement is a significant step towards AI-assisted technologies for perinatal pathologists. <u>Nature</u> <u>Communications 2024; 15, 2710</u>.

- » Conducted primary-care based ultrasound assessment of gestational age in 54 centres across South Africa, Kenya, and Ghana. NPJ Digit Med 2023; 6: 36.
- » Prof. Kazem Rahimi was appointed Editor-in-Chief of BMJ Heart.
- » Stratification of diabetes in the context of comorbidities, using representation learning and topological data analysis. Sci Rep 2023; 13(1):11478.

- » Prof. Sally Collins invited to plenary lectures at the FORGE 2024 conference in Cairo and the EBCOG Congress in Krakow – showcasing her expertise on a global stage.
- » Dr. Yi Yin shared her insights on cutting-edge AI developments at the **Simbiotx** seminar in France.
- » Dr. Reza Soltaninejad invited as keynote speaker at "The Hybrid Congress On Al Applications in Health, Medicine and Insurance".
- » Dr. Sam Matthewlyn presented on the potential of first trimester 3D placental sonography at the iMed congress in Lisbon.

GLOBAL HEALTH

Click for more information and links to important scientific publications





THEME LEAD PROF. ARIS PAPAGEORGHIOU

COORDINATOR DR. NICOLE VOTRUBA

THEME RESEARCH GROUPS

- Cardiovascular Disease / Multimorbidity / Environmental Health (Deep Medicine)
- INTERGROWTH-21st / Every Prem Project / Neurodevelopment (Fernandes/Kennedy/ Papageorghiou/Villar)
- International Childhood Cancer Cohort Consortium (Dwyer)
- Myalgic Encephalomyeltis / Chronic Fatigue Syndrome (Morten)
- The SMARThealth Perinatal Mental Health project (Votruba)



The Global Health theme has made significant strides this academic year, marked by fruitful collaborations and impactful research. Regular meetings were established to enhance communication and collaborative grant writing. Noteworthy visits by international scholars like Dr. Anum Rahim (Aga Khan University), Prof. Maria Perander (The Arctic University of Norway) and Prof. Simone Honikman (AfOx TORCH Visiting Fellow, University of Cape Town, South Africa) further enriched the department's global engagement.

The year also saw major events such as the MitOX conference and the "Maternal Mental Health in Africa – Conversations" symposium, fostering knowledge exchange on critical global health issues.

YEAR IN HIGHLIGHTS

- » Intergrowth-21st published the first normative digital atlas of the human fetal brain, involving 200+ researchers globally. Nature 2023 623:106–114
- » A large-scale study launched in South Africa, Kenya, and Ghana to evaluate ultrasound software for gestational age estimation, with potential UK implementation.
- » The adoption of INTERGROWTH-21st standards in Uruguay, Argentina, Brazil and Bolivia enhanced neonatal care.
- » The HAPIN trial assessed the impact of reducing household air pollution on fetal and perinatal health outcomes across 3,200 households in resourcepoor settings. <u>Env. International 2023;</u> <u>178: 108059</u>

- » An international study on the effects of the Omicron variant during pregnancy was completed, influencing CDC guidelines and vaccination policies. <u>American Journal of Obstetrics and</u> <u>Gynecology 2024</u>.
- » The MRC funded PRAMH study phase 2 was initiated to address mental health in rural India. The Global Women's Mental Health Group was established to tackle issues of stigma and equity.
- » Sodium-based paracetamol: impact on blood pressure, cardiovascular events, and all-cause mortality. <u>Euro</u> <u>Heart Journal 2023; 44: 4448–4457</u>.

- » Prof. Jose Villar was awarded the March of Dimes Agnes Higgins Award for his contributions to maternal-fetal nutrition.
- » Dr. Michelle Fernandes was finalist for the MRC Impact Prize 2023: Early Career Impact in recognition of her achievements in early brain science and international early child development.
- » Daniel Asfaw and his team won the Best Paper Award for "Gated Convolutional Attention Networks for Predicting Adverse Outcomes" at the 16th International Congress on Advanced Applied Informatics.

MATERNAL & FETAL HEALTH

Click for more information and links to important scientific publications





THEME LEAD PROF. FADIL HANNAN

COORDINATOR DR. MOHAMMADREZA SOLTANINEJAD

THEME RESEARCH GROUPS

- Antepartum Monitoring (Jones/Redman/Vatish)
- Intelligent Imaging in Fetal Health (Papageorghiou)
- Human Lactation (Hannan)
- MuM-PreDiCT (Yau)
- Oxford Labour Monitoring (Georgieva)
- Placental Imaging (Collins)
- Pre-eclampsia (Vatish)

Our theme focuses on advancing scientific knowledge, improving clinical practices, and fostering global collaboration in maternal and fetal health. This year we've made significant progress in lactation, intelligent imaging, pre-eclampsia and labour monitoring, to name but a few.

Machine learning has been key in many advancements, such as developing analysis techniques for placental histology. These innovations are enhancing opportunities for early detection and treatments. Our research on extracellular vesicles has also uncovered new mechanisms in disease processes, paving the way for targeted therapies. These achievements highlight our commitment to improving outcomes for mothers and babies worldwide.

YEAR IN HIGHLIGHTS

- The Papageorghiou group demonstrated the 11–14 week pregnancy ultrasound scan can detect fetal anomalies earlier. This approach is under consideration for NHS screening. <u>Ultrasound 2024</u> <u>64:15-27</u>
- » The Oxford Labour Monitoring group developed the Fit4Labour tool to screen early pre-existing injury and fetal vulnerability. Plans are underway to transition it into clinical practice through a spin-out company. BMC Medical Ethics 2023; 24:42
- » The OxNNet Toolkit for predicting adverse pregnancy outcomes was tested on over 7,000 women. It has received substantial recognition and funding for its contributions to perinatal medicine.
- » The Oxford Centre for the Endocrinology of Human Lactation received a £9.12 million endowment, ensuring its long-term sustainability.

- Machine learning for accurate estimation of fetal gestational age based on ultrasound images. <u>npj</u> <u>Digital Medicine 2023; 6, 36</u>.
- » 3D Single Vessel Fractional Moving Blood Volume (3D-svFMBV): Fully Automated Tissue Perfusion Estimation Using Ultrasound. <u>EEE</u> <u>Transactions on Medical Imaging</u> 2024; 43, 707–2717.
- Multimodal Convolutional
 Neural Networks to Detect Fetal
 Compromise During Labor and
 Delivery. IEEE Access 2024; 7: 112026–112036

- » Prof. Fadil Hannan was honoured with the Clinical Endocrinology Journal Foundation Lecture Award for his contributions to the field.
- » Prof. Sally Collins was appointed Chair of the International Society for Placenta Accreta Spectrum and received honorary membership for her outstanding services.
- » Prof. Deborah Goberdhan was elected Secretary General of the International Society for Extracellular Vesicles and received the ISEV Special Contribution Award.
- » We are deeply saddened by the passing of <u>Emeritus Prof. Chris</u> <u>Redman</u>. For over four decades, Chris made huge contributions to maternal and fetal health, through ground-breaking research into pre-eclampsia, development of the Dawes-Redman CTG monitoring system, and his unrelenting passion for improving the care of mothers and babies. We shall miss him.

REPRODUCTIVE MEDICINE AND GENETICS

Click for more information and links to important scientific publications





THEME LEAD PROF. SUZANNAH WILLIAMS

COORDINATOR DR. LYDIA COXON

THEME RESEARCH GROUPS

- Assisted Reproductive Technology (Wells)
- Endometriosis (Becker/Zondervan)
- Immunology of miscarriage (Southcombe/Granne)
- Pain in Women (Vincent)
- Oocytes and Ovaries /
- Female Fertility Preservation (Williams)
- Mitochondrial disease (Poulton)
- Sperm biology / Male fertility preservation (Coward)
- Extra-cellular vesicles in women's health (Goberdhan)



The reproductive medicine and genetics theme encompasses a broad portfolio of research into the role of cellular DNA and mitochondria in reproduction and women's health; the biology of sperm & oocytes; understanding human implantation and miscarriage; fertility preservation across species; and understanding the causes – and improving diagnostic and management options – for pain in women and endometriosis.

YEAR IN HIGHLIGHTS

- Innovations include 3D testicular organoids, improved cryopreservation techniques, and exploration of semen's role in early embryo development. Human Reproduction Update 2023; 4:395–433
- » Exploration of nanoparticles suggests new targeted treatments in women's reproductive health. Nanomedicine 2024;19(14):1231–1251
- » EndoCare's participation in the Oxford Ideas Festival highlights strong public engagement on topics like pelvic pain and consensual sex pain.Numerous public awareness campaigns via media appearances, including the Royal Autopsy TV show and BBC interviews.
- » Released 58 key publications and numerous conference contributions in the past year.

- » The neonatal southern white rhinoceros ovary contains oogonia in germ cell nests. <u>Communications</u> <u>Biology 2023; 6: 1049</u>
- » Symptom flares in women with chronic pelvic pain: Questionnaire study within a cohort study – translational research in pelvic pain (TRiPP). BJOG 2024
- » Incidence of menstrual symptoms suggestive of possible endometriosis in adolescents: and variance in these by ethnicity and socio-economic status. <u>BJOGP 2024; 74 (suppl 1):</u> <u>bjgp24X737685</u>.
- » Created the largest single-cell reference atlas for endometrium to date, a new research tool for women's and reproductive health conditions; in collaboration with the Sanger Institute. **Nat Gen 2024**.

- » Prof. Krina Zondervan elected as a Fellow of the Academy of Medical Sciences.
- » Prof. Katy Vincent awarded Senior Research Fellowship with the National Institute of Health and Care Research (NIHR).
- » Prof. Suzannah Williams appointed as **Diversity Specialist Innovation Partner** at **ATP-Bio**.
- » Dr. Rajwa Mecca won the Andy Glew Prize for best oral presentation at ARCS Symposium.
- » Dr. Fitnat Topbas Selcuki received Best Oral Communication Award at the European Endometriosis Congress in Bucharest.

CLINICAL RESEARCH GROUP

Click for more information about the Clinical Research Group





SENIOR CLINICAL RESEARCH OPERATIONS MANAGER SHARON WESTCAR

The Clinical Research Group (CRG) delivers high-quality, inclusive research in women's and reproductive health, advancing evidence-based care globally through dedication and adaptability, with a patient-centred approach.

Our multidisciplinary team, comprising of doctors, midwives, nurses, scientists, researchers, and support staff, works collaboratively to drive impactful and meaningful research.

In 2023/2024, CRG recruited 40% of the 25,094 individuals involved in research at Oxford University Hospitals (OUH). Notably, 65% of the 7,500 women who gave birth at OUH last year participated in at least one study. Additionally, 526 women generously donated samples to help advance our understanding of endometriosis, lactation, and pre-eclampsia.

10,000 Participants Recruited







Our research portfolio spans studies sponsored by the University of Oxford, other academic institutions, NHS Trusts, and commercial entities. Notably, half of the 10,000+ participants were enrolled in studies led by the Nuffield Department of Women's & Reproductive Health (NDWRH), including key projects such as FENOX (Fibroids & Endometriosis in Oxford), OxPLUS (Oxford Placental Ultrasound), and INSIGHT (Investigating Hormones Triggering the Onset of Sustained Lactation).

Further details on these, and other projects, can be found at **www.wrh.ox.ac.uk/research/crg-current-studies**.

New Initiatives and Leadership

Following a comprehensive service review in 2023, we rebranded from OSPREA to the Clinical Research Group (CRG). We also launched two strategic initiatives: the Career Progression Working Group and the Language Inclusivity Working Group to foster a more inclusive and supportive research environment.

In March 2024, Sharon Westgate joined the team as Clinical Research Operations Manager, alongside Lucy Kingham, who assumed the role of Clinical Research Manager.

PROFESSIONAL SERVICES



HEAD OF ADMIN AND FINANCE **LESA LEVETT**

The Professional Services team made significant strides in 2023/24, reflecting our commitment to excellence, collaboration and innovation.

In May this year, Lesa Levett, Head of Admin and Finance, won the prestigious Vice Chancellor's Award for Innovative Leadership in Professional Services. Initiatives like the Behaviour Charter and Peakon (Pulse Surveys) are now recognised as models for future change and best practices.

The team's adaptability is evident in the numerous secondments in recent years. In 2023/24, Tom Ibbotson served as Finance Manager for Psychiatry during recruitment, demonstrating our readiness to embrace new challenges. Laura Goude, HR Manager, showcased SharePoint for HR across the University, and assisted several MSD departments in tracking recruitment.

Continuous improvement remains a priority; Lesa Levett presented the application of the University's Continuous Improvement Method, using 'FOCUS', at various forums, including the Professional Services Conference 2023/24.

The Professional Services team plays a pivotal role in the governance of the department's Leadership Framework, managing meetings, inducting new members, and providing a seamless process. It operates a paperless system to enhance operational efficiency.

Stage two of the Asana project management system was implemented this year, enabling better task tracking and improving productivity and communication. With over 170 users managing more than 500 projects, the team champions continuous improvement.

The communications team launched a new logo and department brand while promoting our five core themes and associated research projects to a broader local and global audience. Collaborating with businesses and universities, we championed our publications, resulting in increased website and social media engagement and heightened media coverage. In May this year, the team piloted a new service providing PI Support. Its successful implementation will lead to a broader implementation in the autumn.

Our new online PDR system integrates the six key behaviours from our Behaviour Charter, further embedding it in our culture. This system will roll out in the autumn with appropriate training.

In April Tom Ibbotson was promoted to Information Governance Manager, a new position within the Professional Services Team. In this role, he is responsible for ensuring compliance, developing, implementing, and maintaining processes related to audits, policies, export control, and training.

Our apprentice recruitment has been highly successful. The apprentices manage the Social Committee, which organises weekly coffee mornings, promoting diversity and mental health initiatives. The success of each apprentice has resulted in the recruitment of two more for the academic year 2024/25.

The Professional Services team are committed to continuous improvements and providing the best support possible to our scientific colleagues.



STUDY

UNDERGRADUATE MEDICAL TRAINING

CLINICAL TUTOR DR. NEDA TAGHINEJADI CLINICAL TUTOR JOHN HEATHCOTE

EDUCATION MANAGER

Over the 2023/24 academic year, 181 students have rotated through the undergraduate Women's and Reproductive Health course.

Our curriculum focuses on training future clinicians to deliver high-quality patient-centred care. The teaching faculty includes doctors, nurses, midwives, researchers and patients with lived experience.

In the last academic year, we recruited two Clinical Teaching Fellows who have undertaken medical education projects, expanded our team of patient tutors, and developed teaching materials on intersectionality and women's health.

We have also collaborated with the Undergraduate Obstetrics & Gynaecology Society to host events supporting aspiring researchers and clinicians.

Undergraduate student feedback rated the rotation highly, with scores of 4.77/5 for organisation and 4.61/5 for the quality of teaching.

POSTGRADUATE RESEARCH STUDENTS DIRECTOR OF GRADUATE STUDIES **PROF. KARL MORTEN**

Our postgraduate cohort included 65 Postgraduateresearch (PGR) students and 23 Postgraduate-taught (PGT) students.

A pilot Freshers' Week for graduate students successfully welcomed new members and promoted engagement with the department's mission, encouraging cooperation between research groups.

Our students actively participated in the inaugural WRH Science Forum, producing 22 posters and several podium presentations.

A few highlights that hit the news

- Dr. Tatjana Gibbons presented at the Society for Reproductive Investigation annual meeting as lead investigator in the groundbreaking "Detecting Endometriosis expressed integrins using technetium-99m (DETECT)" imaging study – the results of which have been publicised across national media, including the Mail on Sunday.
- Dr. Josephine Agyeman-Duah, along with former DPhil student and postdoc Dr. Shobhana Nagraj, were honoured with permanent portraits at Green Templeton College as part of International Women's Day.

Click for more information about our study programmes



MSC IN CLINICAL EMBRYOLOGY

ASSOCIATE DIRECTOR **PROF. KEVIN COWARD**

COURSE LEADER DR. REBECCA DRAGOVIC

LAB MANAGER CELINE JONES

The MSc in Clinical Embryology prepares future leaders in assisted reproduction and reproductive science for both clinical and research careers. The programme combines academic excellence with practical laboratory skills and a holistic understanding of the field.

To date, 266 graduates from 56 countries have completed this award-winning course, which includes 142 hours of classes, 182 hours of lab work and 13 weeks of research. Our students have published 20 original research papers, 5 reviews, and numerous books, chapters and articles.

The 2023/24 cohort of 23 students from diverse scientific and clinical backgrounds, including Taiwan, Italy, USA, Australia, and others, launched a student-led TikTok account (**@oxford.wrh.msc**) with 10 videos garnering over 9,000 views.



Prof. Kevin Coward also serves on the PGT Strategic Review Working Group for the Medical Sciences Division and plays several roles in MSD Skills Training along with Dr. Rebecca Dragovic.

Celine Jones continues as Chair of the Events Committee (Association of Reproductive and Clinical Scientists). Kevin, Celine and Rebecca hold formal teaching accreditation and continue to mentor departmental candidates seeking affiliation with the Higher Education Academy.

Following thorough market research and a comprehensive business case, the department is thrilled to announce the upcoming launch of two new master's programmes (subject to final institutional approvals) – an MSc in Reproductive and Genetics, and an online MSc in Global Women's Health.

OUTREACH

Public engagement and outreach activities are a crucial part of our department's work. Our researchers and globally renowned experts actively share knowledge gained from cutting-edge research via advisory boards, media appearances, and public events, making a tangible difference for those facing health challenges locally, nationally, and globally. Some key highlights include:

- In October 2023, the Department for Science, Innovation, and Technology launched a video featuring Prof. Sally Collins discussing stillbirths and the OxNNet risk diagnosis tool. The video received over 200,000 views, highlighting the importance of placental imaging.
- At the Oxford Ideas Festival, also in October 2023, our EndoCaRe team engaged the local community in discussions on 'Periods, Pain & the Pelvis.'



- In January 2024, Dr. Tatjana Gibbons and the DETECT research group were featured in the Mail on Sunday showcasing groundbreaking results in endometriosis imaging.
- Prof. Katy Vincent appeared on Sky History's Royal Autopsy series during April 2024 to discuss Queen Mary I's debilitating cramps, which many theorise as endometriosis.
- The Rhino Fertility Project was featured at both the Pint of Science and Begbroke Science Wonder events during May and July 2024 respectively, showcasing how our understanding of fertility can help save a species.

By sharing these, and many more, research-driven outreach initiatives, we aim to empower communities and drive change in women's health globally.

GLOBAL COLLABORATION

ADVANCING WOMEN'S AND REPRODUCTIVE HEALTH THROUGH GLOBAL COLLABORATIONS

Collaborating with leading organisations across the world enables us to work with distinguished experts and maximise our global impact in women's and reproductive health. This supports our department vision of striving towards a world where high-quality, evidence-based care is accessible to all. Some of our active collaborations in 2023/24 are highlighted below.



GRANTS & FINANCE FIGURES

| | FUNDERS (50) | ACTIVE GRANTS (12 | 22) |
|--|--|--|-----|
| | Family Larsson-Rosenquist Foundation | Larsson-Rosenquist Centre for Endocrinology of Human Lactation | |
| | | £2.932.055.50 | |
| | | Optimal postnatal growth | |
| | | 61 074 771 70 | |
| $\pm 29,872,210.04$ (Value of active grants in 2023–24) | | £1,9/4,//1./2 | 14 |
| Non-EU Charity (QR) | £6,436,377.22 | | |
| | Bill & Melinda Gates Foundation | INTERBIO-21st | |
| | £2,346,086.15 | £1,829,168.96 | |
| | Medical Research Council | Eatal wellbeing using Al | |
| | | £1,065,685.34 | |
| | £2,957,844.13 | | |
| | Engineering & Physical Sciences | | |
| £8 810 775 22 | Research Council | | 26 |
| Research Councils | £1,891,452.98 | Turing ALT Burnship she Alass | |
| | Wellcome Lean Inc | £1,018,122.18 | |
| | Welloome Leap into | | |
| | £2,486,274.29 | | |
| | | | |
| £5,351,237.14 | | | |
| Non-EU Other | | | |
| | | | 14 |
| | National Institute for Health Research | | |
| | | | |
| £4,445,783.87 | £2,996,085.91 | | |
| UK Public Sector | | | |
| | Ovarian Cancer Action | | |
| | £1,153,573.28 | | 21 |
| £3,439,/19.60 | | | |
| | | | |
| | | | |
| £3,093,726.07 | | | |
| UK Industry (QR) | | | 15 |
| £1,581,496.55 Non-FU Industry (OR) | | | |
| £1,083,307.14 | | | |
| | | | 6 |
| | | | Ĩ |
| | | | 4 |
| _ | | | 2 |
| EU Industry (QR) £520,565.83 | | | 2 |
| Donations and Internal Fundina £346.162.27 | | | 7 |
| UK Charity (no QR) £292,451.79 | | | 4 |
| EU Government £265,779.15 | | | Δ |
| Multiple Funding Types £252,739.00 | | | 4 |





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Nuffield Department of Women's & Reproductive Health

University of Oxford Level 3, Women's Centre John Radcliffe Hospital Oxford OX3 9DU

* We acknowledge that not everyone designated female at birth considers themselves to be a woman and that many of the issues researched within our department can be particularly challenging for these people. However, for the purposes of clarity and to align with the Government Strategy we continue to use these terms in statements such as these. Research undertaken within the department is, however, inclusive and aims to be relevant to the diverse population.